BENGALURU SOLID WASTE MANAGEMENT LIMITED

TENDER DOCUMENT – KW4

Only through Karnataka Procurement Portal

Operation and Maintenance of existing scientific Landfill sites (Mittaganahalli, Kannur) Rejuvenation and Water quality Improvements of Lakes, Scientific Closure of completed landfill sites in Mahadevapura Zone.

OFFICE OF THE DEPUTY GENERAL MANAGER-02-02,

30/1, 1st Floor, UNI Building, Thimmaiah Road,

Vasanth Nagar, Bengaluru – 560 052

BENGALURU SOLID WASTE MANAGEMENT LIMITED

OFFICE OF THE DEPUTY GENERAL MANAGER-02

TENDERS FOR THE WORK OF

Operation and Maintenance of existing scientific Landfill sites (Mittaganahalli, Kannur) Rejuvenation and Water quality Improvements of Lakes, Scientific Closure of completed landfill sites in Mahadevapura Zone.

TENDER REFERENCE No: DGM-2/BSWML/TEND/06/2024-25 Dated:01/10/2024.

LAST DATE AND TIME FOR SUBMISSION OF TENDERS : Date: 25-10-2024 and time @16.00 Hrs.

TIME AND DATE OF OPENING OF COVER ONE OF TENDER : Date: 28-10-2024 and time @16.30 Hrs.

PLACE OF OPENING OF TECHNICAL BID : Office of the Deputy General Manager-02-02, 30/1, 1st Floor, UNI Building Thimmaiah Road, Vasanth Nagar, BENGALURU -52

TIME AND DATE OF OPENING OF FINANCIAL BID : Will be intimated to the Qualified Tenderers

PLACE OF OPENING OF FINANCIAL BID : Office of the Deputy General Manager-02-02, 30/1, 1st Floor, UNI Building Thimmaiah Road, Vasanth Nagar, BENGALURU -52

ADDRESS FOR COMMUNICATION : Office of the Deputy General Manager-02-02, 30/1, 1st Floor, UNI Building Thimmaiah Road, Vasanth Nagar, BENGALURU -52

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SECTION 1: INVITATION FOR TENDERS (IFT)

BENGALURU SOLID WASTE MANAGEMENT LIMITED

No: **Office of the Deputy General Manager-02**

30/1, 1st Floor, UNI Building Thimmaiah Road, Vasanth Nagar, BENGALURU - 52.

INVITATION FOR TENDER (IFT)
(Short Term Tender Notification-Two Cover Tender)

Through **GOK kpp Portal** only

Tenders on item rate basis are invited by the undersigned for the works mentioned below from the registered contractors of Bruhat Bangalore Mahanagara Palike or equivalent registration with CPWD/KPWD/Railways/MES or any State Government Organizations.

The Tender Document can be downloaded from the GOK kpp Website **(http://kppp.karnataka.gov.in)** on payment of prescribed fee noted against each item of work (non refundable) in the form of e-Payment through kpp Platform. The Tenderer should accompany a copy of the Registration Certificate valid upto the year of 2025 and shall be submitted through kpp Portal. (Standard Tender Bid Document).

Sl. No	Name of the Work	Estimate cost of work (Rs. in Lakhs)	EMD (in Lakhs)	Stipulated Period of Completion (in days)	Eligibility of Contractor and Category
1	**Operation and Maintenance of existing scientific Landfill sites (Mittaganahalli, Kannur) Rejuvenation and Water quality Improvements of Lakes, Scientific Closure of completed landfill sites in Mahadevapura Zone.**	**4800.00**	**Rs.1,00,000/- through e-payment under of the following i.e., online / RTGS / NEFT / OTC and the balance Rs.4700000/- by Bank Guarantee/ FDR issued by**	11 months	Class I & Above

			Nationalized/Scheduled Bank		

NOTE:

1. Pre bid Meeting will be held on the on **15/10/2024 at 15.00 Hours** at the office of The Deputy General Manager-02, BSWML, Bangalore-52.
2. Tenders must be submitted online through kpp portal on or before **16.00 hours on 25/10/2024.**

Technical Bids will be opened on the website https://kppp.karnataka.gov.in in the office of The Deputy General Manager-02, BSWML, Bangalore-52, on **28/10/202 at 16.30 hours**.

3. No Joint Venture is permissible. The validity of tender is 180 days from the date of opening of tender.

Aspiring Bidders/Contractors who have not registered in kpp should register before participating through the website https://kppp.karnataka.gov.in
For details, registration and e-payment visit GOK kpp website https://kppp.karnataka.gov.in or contact kpp Helpdesk.

4. Before submission of online bids, bidders must ensure that scanned copies of all the necessary documents have been attached with bid.
5. All the information required for Bids must be filled and submitted online only.
6. Further details of the work can be obtained in office of The Deputy General Manager-02-, BSWML, Bangalore, on all working days between 10.00 A.M. & 5.00 p.m.

(Sd/-)
The Deputy General Manager-02
Bangalore Solid Waste Management limited.

Copy to:

1. Hon'ble Chairman, BSWML & ACS, UDD for kind information.
2. Hon'ble Managing Director, BSWML/Chief Commissioner, BBMP for kind information.
3. Chief Executive Officer, BSWML /Special Commissioner, SWM, BBMP for kind information.
4. Chief Operational Officer BSWML, for kind information.
5. Chief Financial officer BSWML /CAO, BBMP for kind information.
6. CE (SWM)/Chief Engineer & Chief General Manager(Tech) BSWML, BBMP for kind information
7. Company Secretary, BSWML for kind necessary action.
8. Office Copy

The Deputy General Manager-02
Bangalore Solid Waste Management limited.

SECTION 2: INSTRUCTIONS TO TENDERERS (ITT)

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A. General

1. Scope of Tender

1. 1.1 Office of the office of The Deputy General Manager-02, BSWML, Bangalore-52.

(Referred to as Employer in these documents) invites tenders following Two Cover tender procedure, from eligible Tenderers, for the construction of works **Operation and Maintenance of existing scientific Landfill sites (Mittaganahalli, Kannur) Rejuvenation and Water quality Improvements of Lakes, Scientific Closure of completed landfill sites in Mahadevapura Zone**. (as defined in these documents and referred to as "the works") detailed in the Table given in the Invitation for Tenders (IFT). The Tenderers may submit tenders for any or all of the works detailed in the table given in IFT.

2. Eligible Tenderers

2.1 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Karnataka / BSWML/Any Department in INDIA

2.2 **Tenders from Joint ventures are not acceptable.**

3. Qualification of the Tenderer:

3.1 All Tenderers shall provide the requested information accurately and in sufficient detail in Section 3: Qualification information.

3.2 To qualify for award of this contract, each Tenderer in its name should have in the last Five years that is 2019-20 to 2023-24.

(a) Achieved in at least two financial years a minimum financial turnover (in all classes of civil engineering construction works only) of **Rs. 9600.00 Lakhs** (usually not less than two times the estimated annual payments under this contract)

(b) Satisfactorily completed, (50% of the contract value) as prime contractor, at least one similar work such as Lake development work of value not less than **Rs.2400.00lakhs** (Usually not less than 50% estimated value of contract)

(c) executed in any one year, the following minimum quantities of work:[1]

Description	Qty
a) Desilting	425000 Cum
b) Embankments	157500 Cum
c) Revetment	15200 Cum
d) Concrete	570 Cum
e) Paver Block	8800 Sqm
f) Chain Link Fabric Fencing	5950 Sqm
g) Supply, Installation and Commissioning Cascade Aeration Systems	22 No's
h) Supply and Installation of HDPE Floating Wetlands	699 Sqm

(d) The Tenderer should possess required valid electrical license for executing building electrification works and should have executed similar electrical works totaling Rs..... *(usually not less than 50% of the electrical works)** in any one year;[2] **deleted**

[1] Specify the principal items of works to be executed under this contract

[2] This is for building works. Appropriately change for other works.

(e) The Tenderer should possess valid license for executing water supply/sanitary engineering works and should have executed similar water supply/sanitary engineering works totaling Rs…….. (*usually not less than 50% of the water supply/sanitary engineering works)** in any one year;[3] **deleted**

3.3 Each Tenderer should further demonstrate:

(a) Availability by owning at least 50% of the required/specified key and critical equipment for this work and the remaining 50% can be deployed on lease / hire basis for all works provided the relevant documents (commitment agreements etc.) for availability for this work are furnished.

SL/ NO	**DETAILS**	**REQUIRED NUMBERS**	**OWNERSHIP**
1	Excavator	4 No's	2 Own and 2 Own/Lease.
2	Vibrator Roller8 to 10-ton Capacity	4 No's	2 Own and 2 Own/Lease.
3	Water Tanker 6000 Ltr Capacity	8No's	4 Own and 4 Own/Lease.
4	Tippers	8 No's	4 Own and 4 Own/Lease.
5	Concrete Mixer Machine	4 No's	2 Own and 2 Own/Lease.
6	Ajax Machine	2 No's	2 Own and 2 Own/Lease.

(b) liquid assets and /or availability of credit facilities of not less than **Rs 1600.00 Lakhs** (Credit lines/ letter of credit/certificates from banks for meeting the fund requirement etc. *(usually the equivalent of the estimated cash flow for three months in the peak construction period) **

3.4 To qualify for a package of contracts made up of this and other contracts for which tenders are invited in this IFT, the Tenderer must demonstrate having experience and resources to meet the aggregate of the qualifying criteria for the individual contracts.

3.5 Sub-contractors' experience and resources shall not be taken into account in determining the Tenderer's compliance with the qualifying criteria except to the extent stated in 3.2 (d) and (e) above.

3.6 Tenderers who meet the above specified minimum qualifying criteria, will only be qualified, if their available tender capacity is more than the total tender value. The available tender capacity will be calculated as under:

Assessed available tender capacity = (A*N*1.5-B)

Where

[3] This is for building works. Appropriately change for other works.

A = Maximum value of civil engineering works executed in any one year during the last five years *(updated to ———— [4] price level)* taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which tenders are invited.

B = Value, at ———— [5]price level, of existing commitments and on-going works to be completed during the next.....years *(period of completion of the works for which Tenders are invited) **

Note: *The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Employer in charge, not below the rank of an Executive Engineer or equivalent.*

3.7 Even though the Tenderers meet the above criteria, they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- participated in the previous Tender for the same work and had quoted unreasonably high tender prices and could not furnish rational justification.

4. **One Tender per Tenderer:**

4.1 Each tenderer shall submit only one tender for one package. A tenderer who submits or participates in more than one Tender (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Tenderer's participation to be disqualified.

5. Cost of Tendering:

5.1 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible and liable for those costs.

6. Site visit:

6.1 The Tenderer at his own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for construction of the Works. The cost of visiting the Site shall be at the Tenderer's own expense.

B. Tender documents

7. Content of Tender documents

7.1 The set of tender documents shall have all the Sections given in Page 3:

7.2 Both the sets should be completed and returned with the tender.

8. Clarification of Tender Documents

8.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to tender. The Employer will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission of tenders. Copies of the

[4] FY in which the tenders are invited.

[5] FY in which the tenders are invited

Employer's response will be forwarded to all purchasers of the tender documents, including a description of the enquiry but without identifying its source.

8.2 **Pre-tender meeting:**

8.2.1 The tenderer or his authorized representative is invited to attend a pre-tender meeting

Which will take place at office of The Deputy General Manager-02, BSWML, Bangalore-52.

on 15-10-2024 at 15.00 hours**.**

8.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage

8.2.3 The tenderer is requested to submit any questions in writing or by cable to reach the Employer not later than **15-10-2024** at 17.30 hours of the meeting.

8.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the tender documents. Any modification of the tender documents listed in Sub-Clause 7.1 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 9 and not through the minutes of the pre-tender meeting.

8.2.5 Non-attendance at the pre-tender meeting will not be a cause for disqualification of a tenderer.

9. Amendment of Tender documents

9.1 Before the deadline for submission of tenders, the Employer may modify the tender documents by issuing addenda.

9.2 Any addendum thus issued shall be part of the tender documents and shall be communicated in writing or by cable to all the purchasers of the tender documents.

9.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend as necessary the deadline for submission of tenders, in accordance with Sub-Clause 16.2 below.

C. Preparation of Tenders

10. Documents comprising the Tender

10.1 The tender submitted by the Tenderer shall be in two covers and shall contain the documents as follows:

10.1.1 First Cover:

(a) Earnest Money Deposit Declaration Form;

(b) Qualification Information as per formats given in Section 3;

10.1.2 Second Cover:

(a) The Tender (in the format indicated in Section 4)

(b) Priced Bill of Quantities (Section 9);

and any other materials required to be completed and submitted by Tenderers in accordance with these instructions. The documents listed under Sections 3, 4, 6 and 9 shall be filled in without exception.

10.2 Tenderers submitting tenders together with other contracts stated in the IFT to form a package will so indicate in the tender together with any discounts offered for the award of more than one contract.

11. Tender prices

11.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Tenderer.

11.2 The Tenderer shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total tender price (both in figures and words). **Items for which no rate or price is entered by the Tenderer will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities**. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.

11.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause, shall be included in the rates, prices and total Tender Price submitted by the Tenderer.

11.4 The rates and prices quoted by the Tenderer shall be subject to adjustment during the performance of the Contract in accordance with the provisions of Clause of the Conditions of Contract

11.5 GST shall be paid to the tendered amount separately

12. Tender validity

12.1 Tenders shall remain valid for a period not less than 180 days after the deadline date for tender submission specified in Clause 16. A tender valid for a shorter period shall be rejected by the Employer as non-responsive.

12.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit for a period of the extension, and in compliance with Clause 13 in all respects.

13. Earnest money deposit

13.1 Tenders must be accompanied by Earnest Money Deposit Declaration form as specified in the Tender Document as per G.O. No: FD 675 Expenditure -12/2020 Dated: 22-12-2020.

13.2 NA
13.3 NA
13.4 NA
13.5 NA
13.6 NA

14. Format and signing of Tender

14.1 The Tenderer shall prepare one original and a copy of the documents comprising the Tender as described in Clause 10 of these *Instructions to Tenderers*, and clearly marked "**ORIGINAL**" and "**COPY"** as appropriate. In the event of discrepancy between them, the original shall prevail.

14.2 The original and a copy of the Tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer. All pages of the tender where entries or amendments have been made shall be initialed by the person signing the tender

14.3 The Tender shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person signing the Tender.

D. Submission of Tenders

15. No Tenderers will be accepted physically.

16. Deadline for submission of the Tenders

16.1 Tenders must be received by the Employer by Kpp only as mentioned in

16.2 The Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

E. Tender opening and evaluation

19. Opening of First Cover of all Tenders and evaluation to determine qualified Tenderers:

19.1 The Employer will open the First Covers of all the Tenders received (except those received late or withdrawn), including modifications for First Cover made pursuant to Clause 18, in the presence of the Tenderers or their representatives who choose to attend at..4pm. hours on the date and the place specified in Clause 16. In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.

19.2 The Tenderers names, the presence or absence of earnest money deposit (amount, format and validity), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening. Late and withdrawn Tenders will be returned unopened to tenders.

19.3 The Employer shall prepare minutes of the Tender opening, including the information disclosed to those present in accordance with Sub-Clause 19.3.

19.4 The Employer will evaluate and determine whether each tender (a) meets the eligibility criteria defined in ITT Clause 2; (b) is accompanied by the required earnest money deposit as per stipulations in ITT Clause and (c) meets the minimum qualification criteria stipulated in ITT Clause 3. The Employer will draw out a list of qualified Tenderers.[6]

20. Opening of Second Cover of qualified Tenderers and evaluation:

20.1 The Employer will inform all the Qualified Tenderers the time, date and venue fixed for the opening of the Second Cover containing the priced Tenders. The Employer will open the Second Covers of Qualified Tenderers at the appointed time and date in the presence of the Tenders or their representatives who choose to attend. In the event of the specified date of Second Cover opening being declared a holiday for the Employer, the Second Covers will be opened at the appointed time and location on the next working day.

20.4 The Employer shall prepare minutes of the Second Cover Tender opening, including the information disclosed to those present in accordance with Sub-Clause 20.3.

21. Process to be confidential

21.1 Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until

[6] The evaluation of the technical aspects contained in the first cover should be completed within a reasonable period and the time gap between the opening of the first and second cover should be the minimum and in any case not more than 45 days {In exceptional cases, approval of the Secretary to the Government of the concerned Department/Managing Director of the Corporation shall be obtained, where the period is more than 45 days but less than 60 days. If it exceeds 60 days the tenders shall be reinvited.

the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's processing of Tenders or award decisions may result in the rejection of his Tender.

22 Clarification of Tenders

22.1 To assist in the examination, evaluation, and comparison of Tenders, the Employer may, at his discretion, ask any Tenderer for clarification of his Tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Tenders in accordance with Clause 24.

22.2 Subject to sub-clause 22.1, no Tenderer shall contact the Employer on any matter relating to its Tender from the time of the Tender opening to the time the contract is awarded. If the Tenderer wishes to bring additional information to the notice of the Employer, it should do so in writing.

22.3 Any effort by the Tenderer to influence the Employer in the Employer's Tender evaluation, Tender comparison or contract award decisions may result in the rejection of the Tenderers' Tender.

23. Examination of Tenders and determination of responsiveness

23.1 Prior to the detailed evaluation of Tenders, the Employer will determine whether each Tender; (a) has been properly signed; and; (b) is substantially responsive to the requirements of the Tender documents.

23.2 A substantially responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Tender documents, the Employer's rights or the Tenderer's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

23.3 If a Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. Correction of errors

24.1 Tenders determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) where there is a discrepancy between the rates in figures and in words, the lower of the two will govern[7]; and

(b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

24.2 The amount stated in the Tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Tenderer, shall be considered as binding upon the Tenderer. If the Tenderer does not accept the corrected amount the Tender will be rejected, and the earnest money deposit may be forfeited in accordance with Sub-Clause 13.6 (b).

25. Evaluation and comparison of Tenders

[7] Clause 25(2) of Chapter VI of KTPP Rules 2000 states that " in case of discrepancy between the price quoted in words and figures, the lower of the two shall be considered".

25.1 The Employer will evaluate and compare only the Tenders determined to be substantially responsive in accordance with Clause 23.

25.2 In evaluating the Tenders, the Employer will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows:
(a) making any correction for errors pursuant to Clause 24; and
(b) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 18.5.

25.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Tender evaluation.

25.4 The estimated effect of the price adjustment conditions under Clause 41 of the Conditions of Contract, during the implementation of the Contract, will not be taken into account in tender Evaluation

25.5 If the tender of the successful tenderer is seriously unbalanced in relation to the Employer’s estimate of the cost of the work to be performed under the contract, the Employer may require the Tenderer to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 29 be increased at the expense of the successful Tenderer to a level sufficient to protect the Employer against financial loss in the event of default of the successful tenderer under the contract.

F. Award of Contract

26. Award criteria

26.1 Subject to Clause 27, the Employer will award the Contract to the Tenderer whose Tender has been determined to be substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price, provided that such Tenderer has been determined to be (a) eligible in accordance with the provisions of Clause 2, and (b) qualified in accordance with the provisions of Clause 3.

27. Employer's right to accept any Tender and to reject any or all Tenders

27.1 Notwithstanding Clause 26, the Employer reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the Employer's action.

28. Notification of award and signing of Agreement

28.1 The Tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by cable, telex, e-mail or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

28.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of Security deposit in accordance with the provisions of Clause 29.

28.3 The Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be kept ready for signature of the successful Tenderer in the office of Employer within 30 days following the notification of award along with the Letter of Acceptance. Within 20 days of receipt, the successful Tenderer will sign the Agreement and deliver it to the Employer.

28.4 Upon the furnishing by the successful Tenderer of the Performance Security, the Employer will promptly notify the other Tenderers that their Tenders have been unsuccessful.

29. Security deposit

29.1 Within 20 days of receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Security deposit in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced tenders in accordance with Clause 25.5 of ITT and shall also be provided by the successful tenderer in the form of

- Banker's cheque/Demand draft, /Pay Order in favor of Managing Director, BSWML payable at. BENGALURU or
- A bank guarantee in the form given in Section 10; or
- Specified Small Savings Instruments pledged to Managing Director, BSWML.

29.2 If the security deposit is provided by the successful Tenderer in the form of a Bank Guarantee, it shall be issued either by a Nationalized/Scheduled bank.

29.3 The security deposit if furnished in demand draft can, if requested, be converted to interest bearing securities at the cost of the contractor.

29.4 Failure of the successful Tenderer to comply with the requirements of Sub-Clause 29.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Earnest money deposit.

30 Advance Payment and Security:

30.1 The Employer will provide an advance payment on the contract price as stipulated in the Conditions of Contract, subject to the maximum amount as stated in the Contract Data.

31. Corrupt or Fraudulent practices

31.1 The BSWML requires that the Tenderers/Suppliers/Contractors, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, BSWML:

(a) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(b) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a BSWML contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a BSWML contract.

31.2 Furthermore, Tenderers shall be aware of the provision stated in sub-clause 50.2 of the Conditions of Contract.

SECTION 3: QUALIFICATION INFORMATION

The information to be filled in by the Tenderer here under will be used for purposes of computing Tender capacity as provided for in Clause 3 of the Instructions to Tenderers. This information will not be incorporated in the Contract.

1.1 Constitution or legal status of Tenderer [Attach copy]

Place of Registration _____
(Attach Copy)

Principal place of business: _____

1.2 Total value of civil engineering construction 2019-20 .....
Works executed and payments received in the last five years 2020-21 .....
(In Rs. Lakhs) Attach Certificate from Chartered Accountant 2021-22 .....
2022-23 .....
2023-24 .....

1.3 Work performed as Prime Contractor (in the same name) on works of similar nature over during the five years specified in 1.2 above.

Project Name	Name of Employe r	Descrip- tion of Work	Contract Number	Value of Contract Rs. Lakhs	Date of issue of work order	Specified period of completion	Actual date of Actual date of	Remarks explaining reasons for delay in completion of work
1	2	3	4	5	6	7	8	9

1.4 Quantities of work executed as prime contractor (in the same name) during the last five years specified in 1.2 above:

Year	Name of Work	Name of Employer	Quantity of work performed (cum)[8]			Remarks (Indicate contract reference)
			Cement Concrete	Masonry	Earthwork s	
2019-20						
2020-21						
2021-22						
2022-23						
2023-24						

1.4 Information on works for which Tenders have been submitted and works which are yet to be completed as on the date of this Tender.

(A) <u>Existing commitments and on-going works:</u>

Description of Work	Place & State	Contract No. & Date	Name And Address of Employer	Value of Contract (Rs. lakhs)	Stipulated period of completion	Value of works remaining to be completed (Rs. lakhs) Attach Certificates from Engineers –in-Charge	Anticipated date of completion
1	2	3	4	5	6	7	8

[8] Items of work for which data is requested should tally with that specified in ITT Clause 3

(B) Works for which Tenders already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (Rs. lakhs)	Stipulated period of completion	Date when decision is expected	Remarks if any
1	2	3	4	5	6	7

1.6. The following items of equipment are considered essential for successfully carrying out the works. The Tenderer should furnish all the information listed below.

Item of Equipment	Requirement[9]		Owned	Owned and available		
	No.	Capacity		Number/ Capacity	Age/ condition	Remarks

1.7 Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the last five years;

1.8 Qualification and experience of the key technical and management personnel in permanent employment with the tenderer and those that are proposed to be deployed on this contract, if awarded.

1.9. Name, address, and telephone, telex, and fax numbers of the Tenderers' bankers who may provide references if contacted by the Employer.

1.10 Evidence of access to financial resources to meet the qualification requirement specified in ITT Clause3.3 (b): Cash in hand, Letter of Credit etc. List them below and attach certificate from the Banker in the suggested format as under:

BANKER'S CERTIFICATE

This is to certify that M/s. ..... is a reputed company with a good financial standing. If the contract for this work, namely ..... (*name of the work)* is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. ..... to meet the working capital requirements for executing the above contract

Name of the Bank, Senior Bank Manger with Signature
Address:.....

1.11 Proposals for subcontracting components of works amounting to more than 20% of the contract price.

Item of Work	Value of Sub-Contract	Identified Sub-Contractor (Name and address)	Experience of similar work (Attach certificates from the respective Employers.)
1	2	3	4

1.12 Information on litigations in which the Tenderer is involved:

Other Party (ies)	Employer	Details of dispute	Amount involved	Remarks showing present status

[9] The item of equipment, required number and capacity should match with those specified in ITT Clause 3.3 (a)

1.13 The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

SECTION 4: FORMS OF TENDER, LETTER OF ACEPTANCE, NOTICE TO PROCEED WITH THE WORK AND AGREEMENT FORM

Form of Tender

Description of the Works: ……
……
(To be filled in by the Employer before issue of the Tender document)

Tender

To : ……

Address ……
……
(To be filled in by the Employer before issue of the Tender document)

GENTLEMEN,

We offer to execute the Works described above in accordance with the Conditions of Contract accompanying this Tender for the Contract Price of …… *[in figures] (*……) *[in letters]*.[10]

This Tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any tender you receive.

The advance payment required is Rs……

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely “Prevention of Corruption Act 1988”.

We hereby confirm that this Tender complies with the Tender validity and Earnest money deposit required by the Tender documents.

We attach herewith our current income-tax clearance certificate.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory:
_____

Name of Tenderer _____

[10] To be filled in by the Tenderer, together with his particulars and date of submission at the bottom of the Form of Tender

Address: ----------

Letter of Acceptance

(letterhead paper of the Employer)

.....[date]

To:

.....

..... [name and address of the Contractor]

Dear Sirs,

This is to notify you that your Tender dated ..... for execution of the .....
.....
.....
[name of the contract and identification number, as given in the Instructions to Tenderers]
for the Contract Price of Rupees .....
.....
..... (.....) [amount in words and figures], as corrected and modified in accordance with the Instructions to Tenderers is hereby accepted by our Agency.

You are hereby requested to furnish Security deposit plus additional security for unbalanced tenders in terms of Clause 25.5 of ITT, in the form detailed in Clause 29.1 of ITT for an amount of Rs..... within 20 days of the receipt of this letter of acceptance valid up to 30 days from the date of expiry of Defects Liability Period i.e. up to ..... and sign the contract, failing which action as stated in Para 29.4 of ITT will be taken.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

Issue of Notice to proceed with the work

(letterhead of the Employer)

.....(date)

To

.....
.....
..... (name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security deposit as stipulated in ITT Clause 29.1 and signing of the contract agreement for the construction of .... (name of the work) a Tender Price of Rs..... , you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory authorized to sign on behalf of Employer)

Agreement Form

Agreement

This agreement, made the .....day of .....20....., between.....
.....[name and address of Employer]
(hereinafter called "the Employer") of the one part and .....
.....
.....
[name and address of contractor] (hereinafter called "the Contractor") of the other part.

Whereas the Employer is desirous that the Contractor execute
.....
.....
.....[name and identification number of Contract] (hereinafter called "the Works") and the Employer has accepted the Tender by the Contractor for the execution and completion of such Works and the remedying of any defects therein at a contract price of Rupees.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
   i) Letter of Acceptance;
   ii) Notice to proceed with the works;
   iii) Contractor's Tender;
   iv) Contract Data;
   v) Conditions of contract (including Special Conditions of Contract);
   vi) Specifications;
   vii) Drawings;
   viii) Bill of Quantities; and
   ix) Any other document listed in the Contract Data as forming part of the contract.
   x) Pre-bid proceedings and addendum issued.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of .....
.....
was hereunto affixed in the presence of:
Signed, Sealed and Delivered by the said
.....
.....
in the presence of:
Binding Signature of Employer
.....
Binding Signature of Contractor

SECTION 5: CONDITIONS OF CONTRACT

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Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.
Compensation events are those defined in Clause 38 hereunder.
The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.
The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.
The **Contract Data** defines the documents and other information which comprise the Contract.
The **Contractor** is a person or corporate body whose Tender to carry out the Works has been accepted by the Employer.
The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.
The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
Days are calendar days; **months** are calendar months.
A **Defect** is any part of the Works not completed in accordance with the Contract.
The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.
The **Employer** is the party who will employ the Contractor to carry out the Works.
Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.
The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.
Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.
Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.
The **Site** is the area defined as such in the Contract Data.
Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Employer.
The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.
A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.
A **Variation** is an instruction given by the Employer which varies the Works.
The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

2.2 The documents forming the Contract shall be interpreted in the following order of priority:

(1) Agreement
(2) Letter of Acceptance, notice to proceed with the works
(3) Contractor’s Tender
(4) Contract Data
(5) Conditions of Contract
(6) Specifications
(7) Drawings
(8) Bill of quantities and
(9) Any other document listed in the Contract Data as forming part of the Contract
(10) Pre-bid proceedings and addendum issued.

3. Law governing contract

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor.

5. Delegation

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting (Deleted)

7.1 Deleted.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.

9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's risks

11.1 The Employer is responsible for the excepted risks which are:

(a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or

(b) a cause due solely to the design of the Works, other than the Contractor's design; or

(c) any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:

  (i) could not have reasonably foreseen; or

  (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;

    (A) prevent loss or damage to physical property from occurring by taking appropriate measures or

    (B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

13.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances, in the joint names of the Employer and the Contractor, (cover from the first working day after the Start Date to the end of Defects Liability Period), in the amounts stated in the Contract Data:

(a) for loss of or damage to the Works, Plants and Materials and the Contractor's equipment;
(b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and
(c) for liability of both Parties and of any Employer's representative for death and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payments is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of Consultants, to the design of temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

18.6 The contractor shall also submit the necessary test reports at his own cost for the civil materials and Items Executed in site as prescribed and approved by consultants and Employer

18.7 The contractor shall prepare and submit RA BILLS duly checked and approved by consultants to the employer

18.8 The contractor shall provide a site office for the convenience of employer and consultants

18.9 The contractor shall submit all the AS BUILD drawings during and at the time of completion or else will be liable of fine up to 5 lakhs

19. Safety & site office

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

19.2 The contractor has to set up a site office at common point near site location and provide basic ameneties for engineers and coonsultants to conduct progress review meetings and to attend public orientation programs and keep the drawings and site related documents. . Site office to be provided within 1 month from the date of work order.

19.3 The contarctor also should provide mobile van for site inspections to the department and consultants whenever necessary

19.4 The contractor has to work as per KTCDA rules and ammendments and follow prevailing high court orders regarding water body improvements

20. Discoveries

20..1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.

24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.

24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

25. Program

25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples.

31. Correction of defects

31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined

in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

*D.*Cost Control

33. Bill of Quantities (BOQ)

33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

34. Variations

34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

(a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
(b) Omit any item of work;
(c) Change the character or quality or kind of any item of work;
(d) Change the levels, lines, positions and dimensions of any part of the work;
(e) Execute additional items of work of any kind necessary for the completion of the works; and
(f) Change in any specified sequence, methods or timing of construction of any part of the work.

34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.

34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.

34.4 The Contractor shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation if any. Further, approval of Govt. / BSWML; has to be obtained for the variation exceeding 5%.

35. Payments for Variations

35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.

35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.

35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or

the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract

35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.

35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.

35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

36.1 The Contractor shall submit to the Employer monthly bills duly signed by Consultants for the value of the work completed less the cumulative amount paid previously.

36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

37.1 Payments shall be adjusted for deductions for advance payments other than recoveries in terms of contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The contractor shall be liable to pay liquidated damages for shortfall in progress. For progress beyond the agreed program me payment is subject to availability of the grants.

37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

38.1 The following are Compensation events unless they are caused by the Contractor:

(a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
(b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
(c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
(d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
(e) The effect on the Contractor of any of the Employer's Risks.
(f) The Employer unreasonably delays issuing a Certificate of Completion.
(g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price

shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 **The rates quoted by the Contractor shall be deemed to be Exclusive of the GST and inclusive of other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.**

40. Price Adjustment: DELETED

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments: Deleted

42.1 The Employer shall make payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an unconditional bank guarantee in a form acceptable to the Employer issued by a Nationalized/Scheduled Bank in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.

42.2 The Contractor is to use the advance payment only to pay for Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.

42.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of the work done, variations, price adjustments, compensation events or liquidated damages.

43. Securities:

43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument

acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

45. Completion

45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

46. Taking over

46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor’s revised account.

48. As built drawings and /or Operating and Maintenance Manuals

48.1 If “as built”(*Completion drawings*) Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer’s approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

(a) the Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;

(b) Deleted.

(c) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) Deleted.

(e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;

(f) The Contractor does not maintain a security which is required;

(g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and

(h) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.”

49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.

49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. Property

51.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor’s default.

52. Release from performance

52.1 If the Contract is frustrated by any event entirely outside the control of either the Employer or the Contractor the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made

F. Special Conditions of Contract

1. Labour:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations:

During continuance of the contract, the Contractor shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor in no case shall be treated as the employees of the Employer at any point of time.

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

(a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)

(b) Arbitration proceedings shall be held at…….. ……, Karnataka state (to be filled in by the Employer before issue of the Tender Documents),

(c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However, the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.
(d) Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5. In the case of the death of a Contractor after executing the agreement / commencement of the work, his legal heir, if an eligible registered Contractor and willing can execute and complete the work at the accepted tender rates irrespective of the cost of the work.

6. The Contractor shall produce invoice for procurement of Bitumen along with work bills. No payments will be made without such invoices.

7. Mix Designs for Concrete and Asphalt work shall be got approved by Chief Engineer before commencement of Work.

8. The Contractor shall execute the work in minimum two shifts (Day & Night) for speedy completion of work and to minimize inconvenience to public.

9. The Contractor should have his own laboratory facilities for Quality Control / Quality Assurance of the whole work.

[Add other Clauses specific to the work for which tenders are invited.]

Annexure:

LIST OF ORGANIZATIONS WHO ARE CONSIDERED AS APPOINTING AUTHORITY FOR APPOINTMENT OF ARBITRATORS[11]

1. Indian Council of Arbitration, New Delhi;
2. International Centre for Alternative Disputes Resolution (India);
3. Indian Roads Congress;
4. Indian Building Congress;
5. Indian Institute of Bridge Engineers;
6. Indian Institute of Public Health Engineers;
7. Institute of Water Works

[11] Add any other Organization considered suitable.

SECTION 6: CONTRACT DATA

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract: **Clause Reference**

- The Schedule of Operating and Maintenance Manuals
- The Methodology and Program of Construction [25]
- Site Investigation Reports [14]
- The Schedule of Key and Critical Equipment to be deployed on the work, as per agreed program of construction.

The Employer is:

Name: **The Deputy General Manager-02, BSWML** [1.1]

Address: Office of The Deputy General Manager-02
30/1, 1st & 2nd Floor, UNI Building, Thimmaiah Road,
Vasanth Nagar, Bengaluru – 560 002

Name of authorized Representative:

The name and identification number of the Contract is _____ [insert name and number as indicated in the Invitation for Tenders]. [1.1]

The Works consist of" **Operation and Maintenance of existing scientific Landfill sites (Mittaganahalli, Kannur) Rejuvenation and Water quality Improvements of Lakes, Scientific Closure of completed landfill sites in Mahadevapura Zone.**

[brief summary, including relationship to other contracts under the Project].

The start date shall be the date of issue of notice to proceed with the work.

The Intended Completion Date for the whole of the Works is 11 months [12]with the following milestones [17, 26]

Milestone dates:

	Physical works to be completed	Period from the date of issue of Notice to proceed with the work

The Site Possession Date is:[13] work order issued date [21]

[12] At the time of preparation of the tender document give the period required for completion of whole work and the milestones. When the Agreement is drawn after award of contract the dates can be put in.

[13] At the time of preparation of the tender document give the period after the issue of work order, when the site would be made available to the contractor, for example 'one week after the issue of work order'

The Site is located at Bangalore city
and is defined in drawings nos. _____
_____

The Defects Liability Period is 1 years from the date of completion of Work/Project [31]

Insurance requirements are as under: [13]

	Type of Cover	Minimum cover for Insurance[14]
(i)	Works and of Plant and materials	The sum stated in the Agreement plus 20%
(ii)	Loss or damage to equipment	Full replacement cost
(iii)	Loss or damage to property of Third Party	Full replacement cost
(iv)	Personal injury or death insurance (a) for Third Party	
	(b) for Contractor's employees or labour	In accordance with the statutory requirements applicable to Karnataka

Price Adjustment Formula;[15] if Applicable [40]

R= Value of work as defined in Clause 40.1 of Conditions of Contract.

Adjustment for labour component:

(i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$V_L = 0.85 \times P_L /100 \times R \times (L_i - L_o) / L_o$ Where,

V_L = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour;

L_o = The average consumer price index[16] for industrial workers for BENGALURU Centre for the quarter preceding the date of opening of tenders as published by the Labour Bureau, Ministry of Labour, Government of India;

L_i = The average consumer price index for industrial workers for BENGALURU Centre for the quarter under consideration as published by Labour Bureau, Ministry of Labour, Government of India

P_L = Percentage of labour component of the work

Adjustment for Cement Component:

(ii) Price adjustment for increase or decrease in the cost of cement component procured by the contractor shall be paid in accordance with the following formula.

$$V_C = 0.85 \times P_C /100 \times R \times (C_i - C_o) / C_o \text{ , Where,}$$

V_C = Increase or decrease in the cost of the work during the quarter under consideration due to changes in the rates for cement;

[14] Employer to specify as per requirement. Exclusions if any should also be specified.
[15] The Formula has some normal components. It should be changed if need be to suit the nature of the work.
[16] The Index numbers are available in the web site *http://labourbureau.nic.in/indtab.html*

C_o = The all India average wholesale price index [17]for cement (Ordinary Portland Cement) for the quarter preceding the date of opening of the tenders as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India , New Delhi;

C_i = The all India average wholesale price index for cement (Ordinary Portland Cement) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_C = Percentage of cement component of the work

Note: For the application of this clause index of Ordinary Portland Cement[18] has been chosen to represent Cement Group

Adjustment for steel component:

(iii) Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula.

$V_S = 0.85 \text{ X } P_S/100 \text{ X R X } (S_i - S_o)/S_o$ where,

V_S = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel;

S_o = The all India average wholesale price index for steel (M.S.Bars and rods) for the quarter preceding the date of opening of Bids as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

S_i = The all India average wholesale price index for steel (M.S. Bars and Rods) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, New Delhi

P_S = Percentage of steel component of the work

Note: For the application of this clause, index of M.S.Bars and Rods[19] has been chosen to represent steel group.

Adjustment of Bitumen Component:

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$V_B = 0.85 \text{ X } P_B/100 \text{ X R X } (B_i - B_o)/B_o$, Where

V_B = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.

B_o = The official retail price of bitumen at the IOC /HPCL/BPL or any other depot at ……. [20]on the day 30 days prior to the date of opening of Bids.

B_i = The official retail price of bitumen at the IOC/HPCL/BPL or any other depot at ……. for the 15th day of the middle calendar month of the quarter under consideration.

P_B = Percentage of bitumen component of the work.

Adjustment of Fuel and Lubricant component:

(v) Price adjustment for increase or decrease in cost of Fuel and Lubricants shall be paid in accordance with the following formula:

$V_F = 0.85 \text{ X } P_F/100 \text{ X R X } (F_i - F_o)/ F_o$, Where,

[17] The index number are available in the web site *http://eaindustry.nic.in*

[18] This may be changed to any other type of cement depending on the nature of work.

[19] This may be changed depending on the major type of steel used depending on the nature of work

[20] Insert the nearest location of POL Depot

V_F = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for Fuel and Lubricants.

F_o = The official retail price of High Speed Diesel (HSD) at the IOC/HPCL/BPL or other consumer pump at BENGALURU on the day 30 days prior to the date of opening of Bids.

F_i = The official retail price of HSD at the IOC/HPCL/BPL or other consumer pump at BENGALURU for the 15th day of the middle calendar month of the quarter under consideration.

P_F = Percentage of Fuel and Lubricant component of the work.

Note: For the application of this Clause the price of HSD[21] has been chosen to represent Fuel and Lubricant Group

Adjustment for Plant and Machinery Spares Component:

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the contractor shall be paid in accordance with the following formula:

$$V_P = 0.85 \times P_P/100 \times R \times (P_i - P_o)/P_o \text{ , Where}$$

V_P = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for plant and machinery spares.

P_o = The all India average wholesale price index for Heavy machinery and parts for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_i = The all India average wholesale price index for Heavy machinery and parts for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_B = Percentage of Plant and Machinery Spares component of the work.

Note: For the application of this Clause index of Heavy Machinery and Parts[22] has been chosen to represent the Plant and Machinery Spares Group.

Adjustment for Other materials.:

(vii) Price adjustment for increase or decrease in the cost of other materials other than cement, steel, bitumen and Fuel and Lubricants[23], procured by the contractor shall be paid in accordance with the following formula:

$$V_M = 0.85 \times P_M/100 \times R \times (M_i - M_o)/M_o \text{ , Where}$$

V_M = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for local materials other than cement, steel, bitumen and Fuel and Lubricants.

M_o = The all India average wholesale price index for all commodities for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

M_i = The all India average wholesale price index for all commodities for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_M = Percentage of other material component (Other than cement, steel, bitumen and Fuel and Lubricants) of the work.

[21] This could be appropriately changed to any other item depending on the nature of work.

[22] This could be appropriately changed to any other item depending on the nature of the work.

[23] Add, delete or change depending on the nature of work.

The following percentages will govern the price adjustment for the entire contract:[24]

1.	Labour – P_L	27 %	
2.	Cément – P_C	12%	
3.	Steel – P_S	3%	
4.	Bitumen – P_B		3%
5.	Fuel and Lubricants – P_F[25]		3%
6	Plant and Machinery Spares – P_P[26]	15%	
7	Other materials – P_M		37%
	TOTAL	100 %[27]	

The liquidated damages for the whole of the works are Rs.12000/- (amount) per day[28] and that for the milestones are as under:

For Milestone 1:	Rs. ..... Per day	[41]
For Milestone 2:	Rs. ..... per day	
For Milestone 3:	Rs. ..... Per day	
For Milestone 4:	Rs. ..... Per day	

The maximum amount of liquidated damages for the whole of the works is Ten percent of final contract price. [41]

The amounts of the advance payment are: [42]

Nature of Advance	Amount (Rs.)	Conditions to be fulfilled
1. Mobilization	5% of the Contract price	On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period)

(The advance payment will be paid to the Contractor no later than 30 days after fulfillment of the above conditions).

However, No Mobilization advance is paid in this contract

Repayment of advance payment for mobilization : [42]

The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or —— [29]months from the date of payment of first installment of advance,

[24] The components could be added or deleted or changed depending on the nature of the work.
[25] This could vary from 5% for normal works and 10% for highly mechanized operations in the work
[26] This could vary from 15% for normal works to 30% for highly mechanized operations in the work
[27] The total of the percentages for the various components of the works should be 100.
[28] The amount is usually computed on the basis of 0.1% of the contract price per day. The amount has to be specified as a round figure nearest to the hundred.
[29] To be filled up by the Employer before issue of the tender document; say 'Three or four months'

whichever period concludes earlier, and shall be made at the rate of 7.5% percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.

[30]The date by which "as-built"[31] drawings (in scale ...[32]) in 2 sets are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]
[33]The date by which Operating and Maintenance Manuals are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]

The amount to be withheld for failing to supply "as built" drawings or supply of Operation and Maintenance Manuals by the date required is Rs.5,00,000/-
(The amount should be sufficient to get the completion drawings or Operating and
Maintenance Manuals prepared by alternative agency in case the contractor fails to submit.) [48]

The following events shall also be fundamental breach of the contract:
[49.2]

1. The contractor has contravened Sub-clause 7.1 and Clause 9 of CC.

The percentage to apply to the value of the work not completed representing the Employer's
[50.1]

Additional cost for completing the Works shall be 30 percent (30%) .
(Change if need be. It should be sufficient to get the balance of works completed by alternative agency.)

SECTION 7: SPECIFICATIONS

(ENCLOSED)

SECTION 8: DRAWINGS

(ENCLOSED)

[30] Score out which ever is not applicable.
[31] Completion drawings
[32] Specify an appropriate scale
[33] Score out which ever is not applicable.

SECTION 9: BILL OF QUANTITIES

(ENCLOSED)

Note:

(1) Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 11.2 and CC Clause 37.2).

(2) Unit rates and prices shall be quoted by the Tenderer in Indian Rupees.

(3) Where there is a discrepancy between the rate in figures and words, the lower of the two will govern. [ITT Clause 24.1(a)]

(4) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITT Clause 24.1 (b)]

BILL OF QUANTITY

IT NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE PER RUPEES	AMOUNT IN RUPEES
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. In all kinds of soils Depth upto 1.5 m	cum	4225.351	₹ 249.26	₹ *10,53,210.87*
2	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates.	cum	604.27	₹ 6,168.67	₹ 37,27,511.38
3	Providing and laying in position cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine	cum	352.99	₹ 6,925.93	₹ 24,44,796.47

	aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates				
4	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (10% Added on finished rate of concrete for formwork)	cum	39.45	₹ 6,969.60	₹ 2,74,950.72
5	Providing and fixing Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.	KG	82474.87	₹ 140.08	₹ 1,15,53,079.51
6	Providing and fixing G.I. chain link	SQM	7429.8	₹ 827.09	₹

	fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge. (Made of G.I. wire of dia 4 mm)		0		61,45,113.28
7	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two coat applied @ 0.90 ltr/10 m² over an under coat of primer applied @ 0.80 ltr/10 m² of approved brand and manufacture including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	SQM	7479.80	₹ 143.17	₹ 10,70,882.97
8	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work	cum	15909.52	₹ 105.06	₹ 16,71,454.17
9	Providing and Filling in foundation with granite/trap broken metal 100 mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, loading and unloading complete as per specifications.	cum	2878.83	₹ 2,762.46	₹ 79,52,658.25
10	Providing and laying in position cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality,	cum	2590.67	₹ 6,403.51	₹ 1,65,89,365.24

	labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates				
11	Providing Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level withCement mortar 1:6 (1 cement : 6 coarse sand)	cum	3730.68	₹ 5,779.33	₹ 2,15,60,830.84
12	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	776.30	₹ 6,580.67	₹ 51,08,574.12
13	X coarse aggregates from approved source satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compacting and all other ancillary operations complete as per specifications and approved drawings Sand Layer	cum	2976.44	₹ 2,154.76	₹ 64,13,503.08
14	Providing and constructing vertical /inclined graded filter media using clean, hard graded sand and coarse aggregates from approved source satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compacting and all other ancillary operations complete as per specifications and approved drawings 40 mm down graded coarse aggregate layer	cum	8141.81	₹ 1,860.18	₹ 1,51,45,222.82
15	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications A.Stone/Boulder	cum	18988.71	₹ 1,969.36	₹ 3,73,95,605.93
16	Providing and laying Hariyala or other approved quality turfing sods for the slopes of earthen embankments over	SQM	43799.10	₹ 157.59	₹ 69,02,299.58

	20 mm thick sand backing including cost of all materials, machinery,labour including preparing surface, spreading sand including tamping, watering for 15 days & all necessary works as directed and complete as per specification.				
17	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates(Appendix I – Additionalities for Formwork, Centering & Scaffolding,P.no-112 Sl no -6 Box Culvert-20%)	cum	102.97	₹ 7,831.30	₹ 8,06,388.55
18	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery,labour,cleaning,straightening,cutting,bending,hooking,laping/ welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.All other type of structures	Tonne	78.59	₹ 81,381.33	₹ 63,95,613.05
19	Providing and constructing 300 mm thick rubble stone pitching set in CM 1: 5 proportion by volume with pin headers at 2 per m2 including cost of all materials from approved source, labour, packing stone chips and mortar into joints, finishing, curing and all other ancillary operations complete.	SQM	60.00	₹ 981.59	₹ 58,895.40

20	Providing and fixing pre cast solid cement concrete kerb stones made out of M15 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 pointing and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer In Charge of the work (excluding all taxes)	Nos	34718.23	₹ 417.00	₹ 1,44,77,502.40
21	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	SQM	7898.00	₹ 130.81	₹ 10,33,137.38
22	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m	cum	11885.72	₹ 273.98	₹ 32,56,449.76
23	Providing casing embankment using semi-pervious / pervious approved soil from borrow areas in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using power roller and all other ancillary operations complete. (Disintegrated soil)	cum	4055.75	₹ 647.87	₹ 26,27,598.75
24	Cost of Haulage Excluding Loading and Unloading Case-1 : Surfaced Road .B. Taking output 18 tonne load and lead 10 km	T.KM	7218128.57	₹ 8.24	₹ 5,94,77,379.39

25	Providing and spreading 6mm downsize Granular aggregate,complete as directed by the Engineer In Charge of the work.	cum	637.88	₹ 1,452.30	₹ 9,26,385.86
26	Providing and fixing circular 8 gauge wire net dust bin of diameter 0.60 m with a height of 1.2 m, along with the circular bottom net of 0.6 m dia, including MS flats of 1.2m length and 1 inch width for vertical joint welding, MS flat 1.9m length and 1 inch width for top and bottom edges and MS flat of 2m length and 3/4 inches width for edges of net shutter with latch arrangement having two hinges with a wire net of size 1 inch x 1 inch fixed in concrete bed, including 2 coats of approved paint over one coat of primer including cost of all materials, transportation, labour, curing complete as per drawing and directions of Engineer-in-charge	Nos	46.00	₹ 15,000.00	₹ 6,90,000.00
27	Providing and fixing polished grey granite slab benches of size 5 feet length of seating slab 75mm thick with 1.50 feet width back rest slab of 50mm thick, side slabs of 2.50 feet depth 100mm thick including bull nosing of all edges including fixing using metal paste and cc 1:2:4 including loading and unloading and with all lead and lift etc., complete as per the direction of the Engineer in charge of the work.	Nos	59.00	₹ 19,050.00	₹ 11,23,950.00
28	Supplying and Fixing Solar lights with LED Light.(Battery :12V,40 AH) Including pole,Arm Bracket,including all necessary Accessories etc..complete as per the direction of the Engineer in charge of the work	Nos	44.00	₹ 27,500.00	₹ 12,10,000.00
29	Excavation and removal of silt or slush in marshy condition by mechanical means from Silt traps/Inlets/tank bed using shovel 0.85 cum 110hp , including stacking the same for drying and loading & unloading of the same using Tipper 10 m3, Excluding cost of haulage, including cost of machinary, labour etc., with initial lead upto 50 m and all lifts complete as per the direction of the engineer in charge of	cum	301734.34	₹ 217.00	₹ 6,54,76,350.72

	work.				
30	Preparing slope of existing bund (without pitching) for abutting fresh embankment to strengthen the existing bund by removing grass and othervegitation including disposing off the material as directed with all lead and lifts	SQM	52355.20	₹ 3.09	₹ 1,61,777.57
31	Providing and constructing rockfill embankment using 300mm down graded stones and quarry spalls from approved source including cost of all materials, machinery, labour, spreading stones and spalls in layers, hand packing, wedging, finishing the surface to required slopes as per approved drawings and all other ancillary operations complete	cum	7350.00	₹ 569.59	₹ 41,86,486.50
32	Planting of well rooted plants of Emergent plants and submerged plants like Bullrush, Cardinal flower, Dark green bulrush Plants Etc.,at 200 to 300mm c/c including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work as per the direction of engineer incharge of the work.	SQM	67640.00	₹ 50.00	₹ 33,82,000.00
33	Supply and Installation of HDPE Floating Wetlands for holding Aquatic plants with appropriate fixtures including specially designed bucket for maximum root development to enable nutrient removal in polluted water body including transportation to site and labour cost for assembly of frames, plants complete.Material specification• High Density Poly Ethylene Floats of 330mm x 330mm and 60mm in overall depth and wall thickness of 3mm. • Opening at the Centre with 160mm dia at the top and 140mm at the bottom along with projections on the sides and provision for locking system. • 6mm dia openings at corners. • Oval openings on 4 sides for balanced buoyancy and Ribbed at the bottom for providing adequate strength. • Buckets of 170mm dia at the top and 145mm dia at the bottom with openings on the sides and the bottom	SQM	872.72	₹ 11,500.00	₹ 1,00,36,293.80

	and locks at sides. • Plus shaped connector pin for interconnecting. • 3 inch HDPE pipes and elbows for supporting the floating frames • GI wires 22 gauge and PVC binders for fixing/ binding. • 10 mm Nylon ropes for anchoring.• Minimum of 18 plants per square meter area of the wetlands.• Plants of different species for taking up nutrients from waterbody like Canna Indica, Vetiver, Spider Lilly, Reed, Water Grass, Phragmites and other locally grown varieties in and around the waterbody.DLP on materials used for 2 years				
34	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata.All kinds of soils. Depth upto 1.50 m	cum	5772.15	₹ 269.86	₹ 15,57,672.40
35	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata.Depth exceeding 1.5 m, but not exceeding 3 m	cum	8158.58	₹ 340.93	₹ 27,81,502.97
36	Providing S&S RCC SPUN / VIBRATED	Rmt	2179.2	₹	₹

	CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amentments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing) Before the Execution of the work,the contractor shall carry out the survey. RCC NP3 Class pipe of 600 mm dia		0	3,234.20	70,47,968.64
37	Providing and laying in position cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with superplasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement to be paid separately).. M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Earth retaining structures, 10% added on finished rate of concrete for formwork)	cum	557.09	₹ 7,178.69	₹ 39,99,204.01
38	Dewatering by mechanical means including hire charges of	Hrs	7280.00	₹ 418.18	₹ 30,44,350.40

	machinery,fuel and crew charges etc., complete as per the direction of the Engineer- in charge (statement of hire charges of machinery for the year. with all lead and lift, loading and unloading as per the directions of engineer in charge of work.10 HP Diesel pump				
39	Cutting and burning or disposing off Apu / Jondu from marshy areas as directed with all other ancillary operations complete.	SQM	293554.88	₹ 9.68	₹ 28,42,198.34
40	De-silting in tank bed/Feeder Channel/Canal in dry condition by excavating the deposited bed material and disposing off the same by stacking/ formation of Embankment or as directed including cost of all machinery, labour etc., complete with all lead and all lifts	cum	227350.71	₹ 96.82	₹ 2,20,12,095.30
41	Removal of Unserviceable Soil with Disposal upto a suitable distance as directed by the Engineer incharge of work	cum	26222.80	₹ 87.55	₹ 22,95,806.14
42	Providing new embankment abutting to existing bund to strength the existing bund using soil available in adjacent area in layers of 200 to 250 mm and compacting each layer to density control of not less than 95 percent by vibrating plate compactor or pnuematic tamper including cost of all materials, machinery, labour, picking previous layer, spreading soil in layer, breaking clods, watering, Royalty & all necessary works as directed and complete as per specification.	cum	192662.48	₹ 202.91	₹ 3,90,93,142.80
43	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m	cum	8641.90	₹ 97.85	₹ 8,45,609.92

	including cost of labour, tools, usage of machinery & other appurtenances required to complete the work.In all kinds of soils upto 300 mm depth				
44	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density .	cum	1489.61	₹ 2,635.77	₹ 39,26,265.83
45	Providing and laying 60mm thick factory made precast M -30 grade Cement Concrete Paver Block as per IRC SP 63:2018 & IS 15658 for Cycle Tracks & Pedestrian Footpaths of approved shape and colour, laid in required pattern and including over 30mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in charge. (WMM/WBM Base to be paid separately if necessary as per relevant technical specification). .	SQM	5992.80	₹ 1,100.04	₹ 65,92,319.71
46	Supply, Installation and Commissioning including 3 year maintenance of Cascade Aeration Systems 3 HP with IP68 Protection grade. Aeration system with Ungeared high-speed motors with small propellers, the propellers shall be self-cleaning optimized for effective mixing/ aeration and vibration free running, water displacement capacity of minimum 100m3/kw.hr, dynamically balanced Motor shaft and rotor. Including cost of all the materials, 100m cable, labour, HOM on machineries, loading, unloading, transportation all lead and lift etc. Complete as per specifications and directions of the Engineer-in charge of work.	Nos	27.00	₹ 8,74,000.00	₹ 2,35,98,000.00
47	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of	SQM	95570.91	₹ 4.99	₹ 4,76,440.11

	stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, including removal and disposal of top organic soil not exceeding 150 mm in thickness. ii. By Mechanical Means using Dozer b. In area of thorny jungle				
48	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, including removal and disposal of top organic soil not exceeding 150 mm in thickness.(i) By Manual Means : In area of thorny jungle	SQM	9100.00	₹ 15.45	₹ 1,40,595.00
49	Dewatering by mechanical means including hire charges of machinery,fuel and crew charges etc., complete as per the direction of the Engineer- in charge (statement of hire charges of machinery for the year. with all lead and lift, loading and unloading as per the directions of engineer in charge of work. 5 HP Diesel pump	Hrs	3395.00	₹ 289.43	₹ 9,82,614.85
50	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work. Add 25% for foul condition.	cum	4555.00	₹ 132.28	₹ 6,02,541.09
51	De-silting in tank bed/Feeder Channel/Canal in dry condition by excavating the deposited bed material and loading the same to transport vehicle (excluding cost of transportation) including cost of all machinery, labour & all necessary works as directed and complete as per	cum	24440.00	₹ 55.62	₹ 13,59,352.80

	specification.				
52	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications Mix 1:2:4 Using 40 mm nominal size graded crushed coarse aggregates	cum	18.68	₹ 6,340.68	₹ 1,18,412.20
53	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications Mix 1:2:4 Using 20 mm nominal size graded crushed coarse aggregates	cum	232.94	₹ 6,430.29	₹ 14,97,871.75
54	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications Mix 1:2:4 Using 20 mm	cum	95.88	₹ 6,751.80	₹ 6,47,363.02

	nominal size graded crushed coarse aggregates Add 5% Additionalities for Formwork, Centering & Scaffolding				
55	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. e.Dam & Allied Works	Tonne	2.76	₹ 91,507.26	₹ 2,52,697.30
56	Removing disturbed rough / size stone revetment 300 mm thick with 150 mm thick 40 mm down aggregate backing and resetting the same using the available stones and fresh aggregate from quarry including handpacking, wedging, finishing & all necessary works as directed and complete as per specification.	SQM	2250.00	₹ 383.16	₹ 8,62,110.00
57	Excavating grip trenches of specified size in all kinds of soil in existing bund for abutting fresh embankment to strengthen the existing bund including disposing off the excavated soil in in specified dump area & all necessary works as directed and complete as per specification.	cum	972.00	₹ 257.50	₹ 2,50,290.00
58	Providing and constructing dry rubble rock-toe using rubble and stone chips from approved source including cost of all materials, machinery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes as per approved drawings and all other ancillary operations complete.	cum	980.28	₹ 1,282.35	₹ 12,57,062.06
59	Providing & constructing 45 cm thick hand packed rough stone revetment including through stones at 2 Nos./sqm with 25% of the same projecting 15 cm from finished surface, over a backing of 45 cm thick graded filter consisting of sand, 10 mm & 40 mm size approved, clean, hard, graded, aggregates laid in layers of 15 cm thick each, including cost of all materials, machinery labour etc., complete with all leads and lifts. (For Dam and Allied	SQM	180.00	₹ 1,926.10	₹ 3,46,698.00

	works)				
60	Providing and constructing rockfill embankment with graded rubble of 400 mm and down size from approved quarry including spreading and compacting by vibratory rollers in layers not exceeding 600 mm and finishing the sides to the required slopes including cost of all materials, machinery, labour etc., complete with all leads and lifts. (For Dam and Allied works)	cum	6120.00	₹ 680.83	₹ 41,66,679.60
61	Construction of RCC Machinehole chambers of 1:1.5:3 proportion or approved type Cast-insitu / Pre-cast RCC Machinehole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC Machinehole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 Providing and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-500 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including stone grit beding wherever required, watering, curing, engraving Machinehole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication	each	13.00	₹ 63,161.66	₹ 8,21,101.58

	charges and also cost and conveyance of all materials, labour with all lead and lifts. The Pre-cast RCC Machinehole are for various diamters and depths as stated below and as per detailed drawings, specifications and direction of the Engineer. For Constructing Pre-cast RCC Machinehole 1.2 m internal dia. , 2.0M depth & SFRC cover & frame				
62	Construction of RCC Machinehole chambers of 1:1.5:3 proportion or approved type Cast-insitu / Pre-cast RCC Machinehole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC Machinehole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 Providing and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-500 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including stone grit beding wherever required, watering, curing, engraving Machinehole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and conveyance of all materials, labour with all lead and	each	16.00	₹ 80,842.64	₹ 12,93,482.24

	lifts. The Pre-cast RCC Machinehole are for various diamters and depths as stated below and as per detailed drawings, specifications and direction of the Engineer. For Constructing Pre-cast RCC Machinehole 1.2 m internal dia. , 3.0 M depth & SFRC cover & frame				
63	Providing S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amentments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey.RCC NP3 Class pipe of 900 mm dia.	Rmt'	371.20	₹ 4,999.62	₹ 18,55,858.94
64	Providing and fixing RCC precast fencing pole of size 0.15mx0.15mx2.0m casted in M 20 with 20mm down size aggregates making holes for drawing barbed wire at 30 cm c/c using 8 mm dia vertical 4 TMT steel rods and 6 mm dia stirups at 15 cm c/c fixed 1.5 m above Ground level using steel moulding , curing , transportation to work spot including excavation in all types of soil, fixing in plain cement concrete M15 using 20 mm downsize aggregate including aligning to plumb and line providing including cost of all materials, labour,usage charges of machinery complete.	each	1198.50	₹ 1,117.55	₹ 13,39,383.68
65	Fencing with G.I. barbed wire R.C.C.	Rmt	21573.	₹ 12.36	₹

	post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used. DIAGNAL 2 Nos AND HORIZONTAL 6 Nos		00		2,66,642.28
66	Providing weep holes in Brick masonry/Plain/ Reinforced concrete abutment, wing wall/ return wall with PVC Pipe 110mm outer dia at 2 kg per m2, extending through the full width of the structure with slope of 1V :20H towards drawing foce. Complete as per drawing and Technical Specifications	Rmt	3.00	₹ 246.17	₹ 738.51
67	Back filling behind abutment, wing wall and return wall complete including compaction as per drawing and Technical Specification (Granular material)	cum	11.35	₹ 1,203.04	₹ 13,654.50
68	Providing and constructing size stone pitching using 200 to 250 mm size stones with pin headers at 2 per m2 set in CM 1 : 5 proportion by volume with pointing joints in CM 1 : 3 proportion by volume including cost of all materials from approved source, labour, packing stone chips and mortar into joints,finishing,curing and all other ancillary operations complete. 300 mm thick	cum	78.00	₹ 875.50	₹ 68,289.00
69	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected	cum	2664.00	₹ 131.33	₹ 3,49,849.80

	earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work Add 25% for foul condition.				
70	Cost of Haulage Excluding Loading and Unloading . Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed. B. Taking output 18 tonne load and lead of 01 km is considered.	T.KM	63597.36	₹ 20.60	₹ 13,10,105.55
71	Laying of a geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escape of the embankment material through the voids of the stone pitching/cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching	SQM	60.00	₹ 115.36	₹ 6,921.60
72	Providing hearting embankment using selected approved impervious soil from borrow areas in layers of 250 to 300 mm (before compaction)including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness,sorting out, breaking clods, levelling, sectioning edges / sides, watering,compacting to density control of not less than 95 percent using power roller etc., complete with all lead and all lifts	cum	652.50	₹ 528.39	₹ 3,44,774.48
73	Procurement of Ingredients: Procurement of farmyard manure /compost, sand and red-earth (ingredients) required for raising seedlings inclusive of transportation,breaking of clods, sieving and heaping each ingredient separately at nursery site : Fine coarse Red-earth/soil	cum	1215.00	₹ 555.36	₹ 6,74,756.81
74	Providing and constructing vertical /inclined graded filter media using clean, hard graded sand and coarse aggregates from approved source satisfying specified filter creteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compacting etc., complete as per specifications and approved drawings complete with	cum	108.00	₹ 1,777.78	₹ 1,92,000.24

	all lead and lifts.: 80 mm down graded coarse aggregate layer				
75	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Appendix I – Additionalities for Formwork, Centering & Scaffolding, P No-112 roof slab -50%)	cum	50.23	₹ 10,367.15	₹ 5,20,781.87
76	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery,labour,cleaning,straightening,cutting,bending,hooking,laping/ welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.Buildings	Tonne	3.52	₹ 92,140.71	₹ 3,24,000.94
77	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-2016 with latest ammendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials with electrofusion welding, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected	Rmt'	105.00	₹ 987.77	₹ 1,03,715.85

	earth available from the excation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bedns, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc.Note: HDPE Grade PE80-PN6.0,160mm dia				
78	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-2016 with latest ammendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials with electrofusion welding, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bedns, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc.Note: HDPE Grade PE80-PN6.0,250mm dia	Rmt	16.00	₹ 2,235.10	₹ 35,761.60
79	Supplying and fixing Wafer type single flange Butterfly valve conforming to relevant IS 13099/9991 EN GGG40/50 with latest amendments as detailed below of the following diameter and types with TP set and conveying to work site, loading and unloading, stacking etc. with all lead and lift. The rate is inclusive of the cost of valve, TP set, bolts and nuts and excluding earth work.For Valve of PN 10.0 and 150mm	each	2.00	₹ 12,929.59	₹ 25,859.18
80	Supplying and fixing Wafer type single flange Butterfly valve conforming to relevant IS 13099/9991 EN GGG40/50 with latest amendments as detailed below of the following diameter and types with TP set and conveying to work site, loading and unloading, stacking etc. with all lead and lift. The	each	2.00	₹ 15,835.22	₹ 31,670.44

	rate is inclusive of the cost of valve, TP set, bolts and nuts and excluding earth work.For Valve of PN 10.0 and 250mm				
81	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.	SQM	134.51	₹ 1,349.30	₹ 1,81,494.34
82	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.	SQM	19.11	₹ 1,137.12	₹ 21,730.36
83	Providing 12 mm cement plaster with cement mortar 1:4 (1 cement: 4 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.	SQM	44.75	₹ 248.23	₹ 11,108.91
84	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster with cement mortar 1:3 (1 cement : 3 coarse sand) finished rough with sponge to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.	SQM	184.75	₹ 396.55	₹ 73,260.63
85	Providing & fixing of 2-track x 2-panel sliding windows made out of multi	SQM	4.77	₹ 5,551.70	₹ 26,481.61

	chambered UPVC (Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 50mm width x 42mmheight with reinforcement of 1mm thickness and Sash with overall size of 31mm X 57mm with Gi reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 21.5mm x 9.5 mm. Windows shall be provided with 5mm plain float glass, standard hardware& single point locking system with touch lock.Wall thickness of frame & sash shall be of 1.8+-0.2 mm. Maximum possible size – 1519mm x 1519mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made)				
86	SUPPLYING AND FIXING OF GAZEBO MADE OF SADARAHALLI GRANITE STONE OF SIZE NOT LESS THAN 18 FEET *18 FEET , WITH ALROUND GRANITE SEATING AND ENTRANCE STEPS WITH ALL NECESSARY TRUSS WORK TO ROOFING , ROOFING SHALL BE OF GRANITE SLAB OR MANGALORE TILE OF TYPE PORTUGUESE PATTERN OR MASTER BAMBOO OR JAPAN DUTCH TYPE OF ROOF TILES AS DIRECTED BY ENGINEER INCHARGE OF WORK . TRUSS ARE OF ISI GRADE AND ARE PAINTED WITH TWO COATS OF PRIMER AND TWO COATS OF PAINT OVER STEEL INCLUDING OF COST OF ALL LABOUR, FABRICATING, MACHINARIES, MATERIAL ETC,. INCLUDING FIXING THE GAZEBO PILLER IN CC 1:2:4 , CURING ETC., COMPLETE WITH ALL LEAD, LIFT, LOADING UNLOADING AND ANY OTHER INCIDENTAL CHARGES AND AS PER SPEC AND DIRECTION OF ENGG IN CHARGE OF WORK.	UNIT	4.00	₹ 9,50,000.00	₹ 38,00,000.00

87	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	each	2.00	₹ 4,983.14	₹ 9,966.28
88	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	each	2.00	₹ 5,030.52	₹ 10,061.04
89	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	2.00	₹ 4,587.62	₹ 9,175.24
90	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	8.00	₹ 48.41	₹ 387.28
91	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	UNIT	2.00	₹ 2,415.35	₹ 4,830.70
92	Providing and fixing Chorinated Poly Vinyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This	Rmt	50.00	₹ 390.37	₹ 19,518.50

	includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and making good walls) 20mm nominal OD pipes				
93	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore	No's	10.00	₹ 314.15	₹ 3,141.50
94	Providing and fixing on terrace polyethylene water storage tank, IS:12701 marked, with cover and suitable marking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fitting and the base support for tank	Ltr	2000.00	₹ 9.27	₹ 18,540.00
95	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work-100 mm dia	Rmt	30.00	₹ 2,599.72	₹ 77,991.60
96	Providing& fixing of Openable door made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPV(Thermo Plastic Vulcanized) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the openable frame. The frame having overall size of 60mm x 55mm with GI reinforcement of 1mm thickness and openable sash with overall size of 60mm x 102mm and GI reinforcement of 2mm thickness. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 34 mm. Windows shall be provided with 6mm plain float glass, Standard hardware with 2D/3D hinge & Multi point locking system with Handle. Wall thickness of frame & sash shall be of 2mm-2.5mm. Maximum possible size – 900mm x 2400mm.(The cost is inclusive of all fixtures and separate	SQM	11.97	₹ 6,432.35	₹ 76,995.23

	charges for minor T&P's shall not be made)				
97	Providing, supplying to work site,Single Phase Submersible Pump Sets of 100mm dia (4 inch) suitable for bore well confirming to IS 8034-2000 specifications,with testing of as per instructions of engineer incharge of work and latest amendments.0.50 HP/0.37kW - 5 STG(stage)	each	1.00	₹ 10,475.10	₹ 10,475.10
98	Concealed Conduit System: Supplying heavy gauge PVC conduit pipe 25 mm dia 2 mm thick confirming to IS 2509 with suitable sizebends, metal/PVC Junction boxes, adhesive paste etc., andrunning before concreting the slab. The conduit should be tiedto the reinforcement rods by using binding wires and unusedways of junction boxes and pipe ends should be coveredusing PVC end enclosures, run with 18SWG GI fish wirewherever necessary	Rmt	80.00	₹ 78.00	₹ 6,240.00
99	Supplying And Fixing Metal Fan Box with Round Hook.	No's	1.00	₹ 117.00	₹ 117.00
100	Supplying and fixing regular MCB distribution boards on wall/ood board / flush mounting using required clA, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase/3 phase/single door with powder coated painting Made out of 14 SWG MS enclosure. : I - Single Door : 12 Way SP & N	each	1.00	₹ 1,863.00	₹ 1,863.00
101	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker (ELMCB) 240/450V upto 300mA sensitivity on existing wood/panel board. : 32-40 A 2 pole	each	1.00	₹ 4,559.00	₹ 4,559.00
102	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.5mm2 (Phase & Neutral) & 1x1.0 mm 2 (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments) with a 6A flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length	Point	20.00	₹ 379.00	₹ 7,580.00

	in a wood/PVC round block. complete for each outlet- Medium point above 3m upto 6m from tapping point to out let via switch box				
103	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS 694:confirming to latest amendments.: 4 mm2	Rmt	100.00	₹ 63.00	₹ 6,300.00
104	Supplying 6A flush type socket and 6 A flush type SP switch either surface/flush mounting in existing gang box or in 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required as per IS 1293 and IS 3654 : 6A 2 Way	each	6.00	₹ 128.00	₹ 768.00
105	Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board. : 16A SP Switch	each	6.00	₹ 130.00	₹ 780.00
106	Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board. : 16/6A combined plug and socket with control switch	each	4.00	₹ 218.00	₹ 872.00
107	Supplying of recess mounting non integrated type LED down light 10-12W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clA, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per W, 120degree beam spread, life> 25000 burning hours and Compliance to IS10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LED's are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should< 5% of lamp Wage, short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 V. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2	each	16.00	₹ 1,269.00	₹ 20,304.00

	years Warranty against any manufacturing defect working under standard electrical condition. 10-12W				
108	Providing and laying flooring and steps machine cut granite slabs 40 mm thick on cement mortar bed 1:6, 25 mm thick, and pointed witce_x0002_ment mortar 1:3 over existing cement concrete bed , including cost of materials, mortar labour, curing complete as per specifications.	SQM	30.00	₹ 4,492.95	₹ 1,34,788.50
109	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer including cost of materials ,labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.	SQM	7.56	₹ 8,524.28	₹ 64,443.56
110	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination Grade I, Type II, IS : 12823 marked, including priming coat on unexposed arrangement and screws etc. complete	SQM	25.20	₹ 1,142.27	₹ 28,785.20
111	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :Two coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge	SQM	244.28	₹ 172.01	₹ 42,018.60
112	Constructing brick masonry chamber of internal dimension 600x450mm and	each	2.00	₹ 4,934.73	₹ 9,869.46

	depth of 600mm (inner dimensions) with modular bricks of CD 75 in cement mortar 1:6, bed concrete 150mm thick with 1:3:6, plastering 12 mm thick with cement mortar 1:4, CC 1:2:4 coping 75mmhk for fixing CI cover & frame etc. excluding the cost of CI frame and cover				
113	Supplying to work spot rolling, lowering and placing in position RCC perforated rings in the already excavated pit including loading and unloading at both the destinations with all lead and lift with appurtenances., complete: 1200 mmx1250 mm	each	3.00	₹ 9,830.32	₹ 29,490.96
114	Removing dry stone rock- toe / rivetment and filter layers below rocktoe/ rivetment including stacking all materials separately as directed with all other ancillary operations complete.	cum	1260.00	₹ 325.48	₹ 4,10,104.80
115	Compacting original ground supporting embankment : Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction.	cum	1345.63	₹ 108.15	₹ 1,45,530.00
116	Providing B S slab of selected quality roughly dressed having a size of 10cms thick and fixed in cement mortor (1:6) including fixing curing etc, complete as directed by the engineer in charge of the work (Excluding Gst & Area Loading Charges	SQM	630.00	₹ 862.11	₹ 5,43,129.30
117	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes	cum	58.26	₹ 9,036.86	₹ 5,26,523.58

	wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement to be paid separately) M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (CC drain work, 35% added on finished rate of concrete for formwork)				
118	Providing and constructing vertical /inclined graded filter media using clean, hard graded sand and coarse aggregates from approved source satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compacting and all other ancillary operations complete as per specifications and approved drawings. 20 mm down graded coarse aggregate layer	cum	32.40	₹ 2,024.98	₹ 65,609.35
119	Providing weep holes in Brick masonry/Plain/ Reinforced concrete abutment, wing wall/ return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing foce. Complete as per drawing and Technical Specifications	Rmt	39.00	₹ 142.14	₹ 5,543.46
120	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all	cum	47.07	₹ 8,032.76	₹ 3,78,102.20

	other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement to be paid separately) M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (CC drain work, 35% added on finished rate of concrete for formwork)				
121	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour,rolling,water,all materials,usage& all other appurtenaces required to complete the work.	cum	9369.00	₹ 504.34	₹ 47,25,123.98
122	Providing Bio product solutions prepared at site and spraying on existing and fresh garbage ,accumulated leachate and surrounding area with effective proportion diluted in water to reduce foul smell and control pests including cost of all materials,labour, HOM on machiney ,loading ,unloading,transportation all lead and lifts, taxes etc., Complete asper specifications and directions of Engineer incharge of work.	Liter	22500.00	₹ 29.20	₹ 6,57,000.00
123	Hydraulic Excavator of 1.2 m3 bucket	Hrs	630.00	₹ 1,800.00	₹ 11,34,000.00
124	Dozer - 175 HP	Hrs	288.00	₹ 4,193.00	₹ 12,07,584.00
125	Tractor-Trolley	Hrs	144.00	₹ 659.00	₹ 94,896.00
126	Tipper-14 m3	Hrs	288.00	₹ 1,993.00	₹ 5,73,984.00
127	Vibratory Soil Compactor (10 t)	Hrs	288.00	₹ 2,005.00	₹ 5,77,440.00
128	Water Tanker (12 KL)	Hrs	576.00	₹ 945.00	₹ 5,44,320.00
129	Cleaner, Asphalt sprayer, Driller, Savgani or chavli, White Washer, Colour Washer, Sawyer, Helper to Fitter, Gardener, Cook, Dhobi, Care	Day	108.00	₹ 771.60	₹ 83,332.80

	taker, Hammer man, Lift Operator, Bamboo maker, Helper to Carpenter, Gang man, Boatman, Jumper man, Brick molder, Asphalt Boiler Attendant, Limestone Burner, Mason & Brickler class-II, Carpernter Class -II, Fitter class-II Mechanic class-II, Stone Voddar, Diesel Compressor Operator, Fireman in Bricks Plant, Trained Mali with Certificate, Bisti with water bag, Horticulture Gardener, Glayer, Patkaries, Tile Layer (Glazed Mosaic Tiles etc.), Mess man, Tracer (Certificate holder). Labours for Spraying of Enzymes to controle Foul Odour				
130	Blacksmith, Stone cutting, Mason or Brick Layer Class I Carpenter Class I Plumber Tin smith Foreman, Sarang, Painter, Fitter Class I Mechanic Class I Pneumatic drilled, Engine Driver, Gas or Electric welder, Gauge Repairer, Laboratory Assistant, Machine Operator, Turner, Welder, Crane Driver, Stone Crusher, Jack Hammer driver, Blaster, Stone Cristler, Floor polisher, Riveter, Mason, Pump Driver, Stone Polisher, Bar Bender, Stone Revetment Builder, Electrician, Maistry or Supervisor/Clerk Grade.I, Horticulture Supervisor, Shovel and Scraper.	Day	54.00	₹ 812.00	₹ 43,848.22
131	Supplying of premisc/,nuan/Biomass etc., chemical forspraying to control fly menace with all applicable taxes including all lead and lift charges as per the direction of engineer incharges	Litr	36.00	₹ 3,456.00	₹ 1,24,417.00
132	Supplying of Sugar to mix with the chcmical along with the water. For spraying to controle fly menace and all applicable taxes including all lead and lift charges as per the direction of engineer incharges	kG	360.00	₹ 54.00	₹ 19,440.00
133	Spraying of premise chemical solution prepared by mixing the Chemical with sugar and water @ the ratio 5ml of chemical for 1 litre of water to control fly menace. Spraying Labours - 3 Nos	No's	27.00	₹ 594.00	₹ 16,038.00
13	Supplying preparation and spraying of	Ltr	34200.	₹ 16.20	₹

4	lemon grass to reduce foul labors and controlin pets including cost of materials and labours for preparation spraying supervision HOM on water tanker fuel charges and crew charges loading unloading transportation labours charges incindenal charges etc... complete and with all lead and lift loading and unloding as per the direction of engineer in charge of work		00		5,54,040.00
135	Procuring of spraying machines to spray above solutions including all lead and fil1 charges as per the direction of engineer incharge	No's	14.00	₹ 2,430.00	₹ 34,020.00
136	Supplying ol pyetrum / king fog ctc.., (contains detamethrine 1.25%l by thermal fogging to control mosquito & menace including all lead and lift charges as per the direction of engineer incharges	Set	54.00	₹ 3,996.00	₹ 2,15,784.00
137	Supply mixing of diesel with chemical in required ratio with diesel and petrol in the fogging machine -10 litre/day including all lead and lift charges as per the direction of engineer incharge	Ltr	315.00	₹ 97.20	₹ 30,618.00
138	Labour for fogging in the quarry site and surrounding villages on the vehicle including fogging equipment charges vehicle hire charges and othcr incidental charges with all lead and lifts.	No's	108.00	₹ 594.00	₹ 64,152.00
				SUB-TOTAL	**48,00,00,000.00**

SECTION 10: FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT

To: ..... *[name of Employer]*
..... *[address of Employer]*

WHEREAS ..... *[name and address of Contractor]* (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. ..... dated: ..... to execute .....*[name of Contract and brief description of Works]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Rs. ..... *[amount of guarantee]* [34]_Rupees.....*[in words]*, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of ..... *[amount of guarantee]*[35] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 30 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

[34] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract

[35] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract

28 days